

**WE CLAIM:**

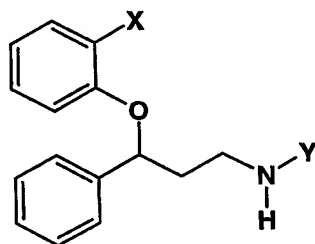
1. A method of treating a learning disability or a Motor Skills Disorder,  
comprising administering to a patient in need of such treatment an effective amount of a  
5 norepinephrine reuptake inhibitor selected from the group consisting of:

atomoxetine or a pharmaceutically acceptable salt thereof;

racemic reboxetine or a pharmaceutically acceptable salt thereof;

(S,S) reboxetine or a pharmaceutically acceptable salt thereof;

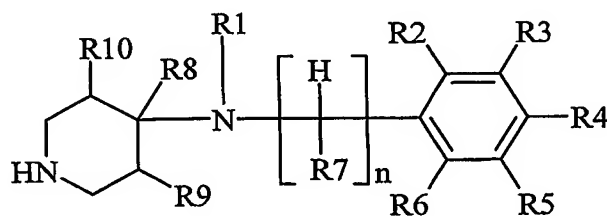
a compound of formula (I):



(I)

wherein X is C<sub>1</sub>-C<sub>4</sub> alkylthio, and Y is C<sub>1</sub>-C<sub>2</sub> alkyl, or a pharmaceutically  
acceptable salt thereof;

a compound of formula (IA):



(IA)

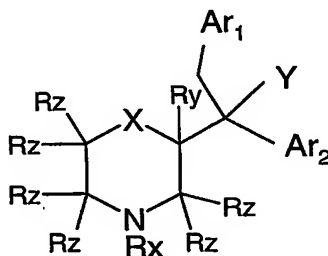
wherein n is 1, 2 or 3; R<sub>1</sub> is C<sub>2</sub>-C<sub>10</sub>alkyl, C<sub>2</sub>-C<sub>10</sub>alkenyl, C<sub>3</sub>-C<sub>8</sub>cycloalkyl or  
C<sub>4</sub>-C<sub>10</sub>cycloalkylalkyl, wherein one C-C bond within any cycloalkyl moiety is optionally  
20 substituted by an O-C or C=C bond and wherein each group is optionally substituted with  
from 1 to 7 halogen substituents and/or with from 1 to 3 substituents each independently  
selected from hydroxy, cyano, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy; R<sub>2</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl

(optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkyl-S(O)<sub>x</sub>- wherein x is 0, 1 or 2 (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms), cyano, halogen, phenyl (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy), phenoxy (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy) or -CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub>alkyl), or together with R<sub>3</sub> forms a further benzene ring (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy); R<sub>3</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkyl-S(O)<sub>x</sub>- wherein x is 0, 1 or 2 (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms), cyano, halogen, phenyl (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy), phenoxy (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy) or -CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub>alkyl), or together with R<sub>2</sub> or R<sub>4</sub> forms a further benzene ring (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy); R<sub>4</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkyl-S(O)<sub>x</sub>- wherein x is 0, 1 or 2 (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms), cyano, halogen, phenyl (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy), phenoxy (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy) or -CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub>alkyl), or together with R<sub>3</sub> forms a further benzene ring (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy); R<sub>5</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms) or halogen; R<sub>6</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms),

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C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms) or halogen; R<sub>7</sub> is H or C<sub>1</sub>-C<sub>4</sub>alkyl; R<sub>8</sub> is H or C<sub>1</sub>-C<sub>4</sub>alkyl; R<sub>9</sub> is H, halogen, hydroxy, cyano, C<sub>1</sub>-C<sub>4</sub>alkyl or C<sub>1</sub>-C<sub>4</sub>alkoxy; and R<sub>10</sub> is H, halogen, hydroxy, cyano, C<sub>1</sub>-C<sub>4</sub>alkyl or C<sub>1</sub>-C<sub>4</sub>alkoxy; or a pharmaceutically acceptable salt thereof, with the proviso that the compound N-ethyl-N-benzyl-4-piperidinamine is excluded;

a compound of formula (IB):

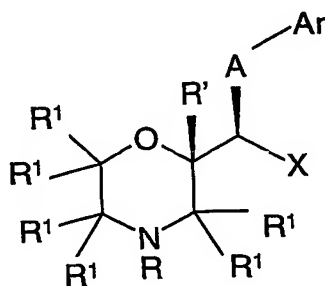


(IB)

wherein R<sub>X</sub> is H; R<sub>Y</sub> is H or C<sub>1</sub>-C<sub>4</sub> alkyl; each R<sub>Z</sub> is independently H or C<sub>1</sub>-C<sub>4</sub> alkyl; X represents O; Y represents OH or OR; R is C<sub>1</sub>-C<sub>4</sub> alkyl; Ar<sub>1</sub> is a phenyl ring or a 5- or 6-membered heteroaryl ring each of which may be substituted with 1, 2, 3, 4 or 5 substituents (depending upon the number of available substitution positions) each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl), S(C<sub>1</sub>-C<sub>4</sub> alkyl), halo, hydroxy, pyridyl, thiophenyl and phenyl optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, or O(C<sub>1</sub>-C<sub>4</sub> alkyl); and Ar<sub>2</sub> is a phenyl ring or a 5- or 6-membered heteroaryl ring each of which may be substituted with 1, 2, 3, 4 or 5 substituents (depending upon the number of available substitution positions) each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl) and halo; wherein each above-mentioned C<sub>1</sub>-C<sub>4</sub> alkyl group is optionally substituted with one or more halo atoms; or a pharmaceutically acceptable salt thereof;

a compound of formula (IC)

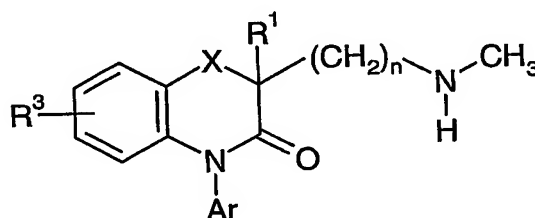
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(IC)

- wherein: A is S or O; R is H; Ar is a phenyl group optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl), S(C<sub>1</sub>-C<sub>4</sub> alkyl), halo, hydroxy, CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub> alkyl), pyridyl, thiophenyl and phenyl optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, or O(C<sub>1</sub>-C<sub>4</sub> alkyl); X is a phenyl group optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, or O(C<sub>1</sub>-C<sub>4</sub> alkyl); a C<sub>1</sub>-C<sub>4</sub> alkyl group; a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group or a CH<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub> cycloalkyl) group; R' is H or C<sub>1</sub>-C<sub>4</sub> alkyl; each R<sup>1</sup> is independently H or C<sub>1</sub>-C<sub>4</sub> alkyl; wherein each above-mentioned C<sub>1</sub>-C<sub>4</sub> alkyl group is optionally substituted with one or more halo atoms; or a pharmaceutically acceptable salt thereof; with the proviso that, when A is O, X is a C<sub>1</sub>-C<sub>4</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group or a CH<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub> cycloalkyl) group;

a compound of formula (ID)

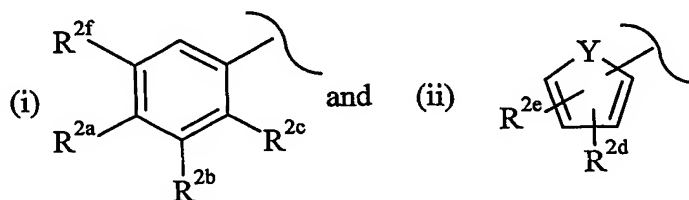


(ID)

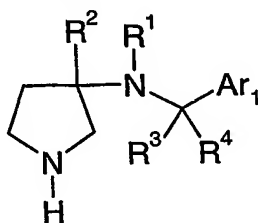
wherein -X- is -C(R<sup>4</sup>R<sup>5</sup>)-, -O- or -S-; n is 2 or 3; R<sup>1</sup> is H or C<sub>1</sub>-C<sub>4</sub> alkyl; R<sup>3</sup> is H, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl), nitrile, phenyl or substituted phenyl; R<sup>4</sup> and R<sup>5</sup> are each independently selected from H or C<sub>1</sub>-C<sub>4</sub> alkyl; Ar- is selected from the group consisting

20 of

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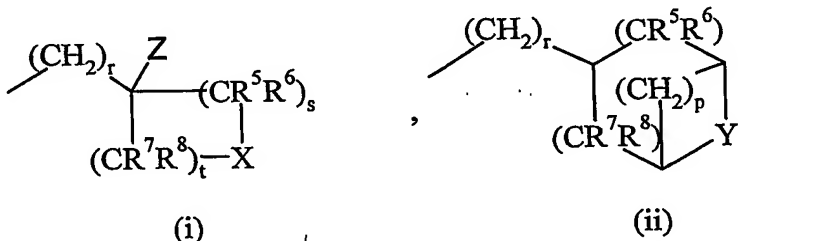


- in which  $R^{2a}$  is H, halo, methyl or ethyl;  $R^{2b}$  is H, halo or methyl;  $R^{2c}$  is H, halo, methyl, trifluoromethyl, nitrile, or methoxy;  $R^{2d}$  is H, halo, methyl or ethyl;  $R^{2e}$  is H, halo, methyl, trifluoromethyl, nitrile, or methoxy;  $R^{2f}$  is H, or fluoro; -Y- is -O-, -S- or -N( $R^6$ )-; and  $R^6$  is H or methyl or a pharmaceutically acceptable salt thereof;
- 5 a compound of formula (IE)



(IE)

- wherein  $R^1$  is  $C_1$ - $C_6$  alkyl (optionally substituted with 1, 2 or 3 halo substituents and/or with 1 substituent selected from -S-( $C_1$ - $C_3$  alkyl), -O-( $C_1$ - $C_3$  alkyl) (optionally substituted with 1, 2 or 3 F atoms), -O-( $C_3$ - $C_6$  cycloalkyl), -SO<sub>2</sub>-( $C_1$ - $C_3$  alkyl), -CN, -COO-( $C_1$ - $C_2$  alkyl) and -OH);  $C_2$ - $C_6$  alkenyl; -(CH<sub>2</sub>)<sub>q</sub>-Ar<sub>2</sub>; or a group of formula (i) or (ii)
- 10



- $R^2$ ,  $R^3$  and  $R^4$  are each independently selected from hydrogen or  $C_1$ - $C_2$  alkyl;  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  are at each occurrence independently selected from hydrogen or  $C_1$ - $C_2$  alkyl; -X- is a bond, -CH<sub>2</sub>-, -CH=CH-, -O-, -S-, or -SO<sub>2</sub>-; -Y- is a bond, -CH<sub>2</sub>- or -O-; -Z is hydrogen, -OH or -O-( $C_1$ - $C_3$  alkyl); p is 0, 1 or 2; q is 0, 1 or 2; r is 0 or 1; s is 0, 1, 2 or 3; t is 0, 1, 2 or 3; Ar<sub>1</sub> is phenyl, pyridyl, thiazolyl, benzothiophenyl or naphthyl;
- 15
- wherein said phenyl, pyridyl or thiazolyl group may be substituted with 1, 2 or 3 substituents each independently selected from halo, cyano,  $C_1$ - $C_4$  alkyl (optionally
- 20

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substituted with 1, 2 or 3 F atoms), -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms) and -S-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms) and/or with 1 substituent selected from pyridyl, pyrazole, phenyl (optionally substituted with 1, 2 or 3 halo substituents) and phenoxy (optionally substituted with 1, 2 or 3 halo substituents);

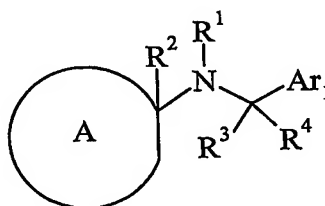
5 and wherein said benzothiophenyl or naphthyl group may be optionally substituted with 1, 2 or 3 substituents each independently selected from halo, cyano, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms), -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms), and -S-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); Ar<sub>2</sub> is naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl,

10 wherein said naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl may be substituted with 1, 2 or 3 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms) and -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); or a pharmaceutically acceptable salt thereof;

provided that (a) the cyclic portion of the group of formula (i) must contain at least three

15 carbon atoms and not more than seven ring atoms; (b) when -X- is -CH=CH-, then the cyclic portion of the group of formula (i) must contain at least five carbon atoms; and (c) when -Z is -OH or -O-(C<sub>1</sub>-C<sub>3</sub> alkyl), then -X- is -CH<sub>2</sub>-; (d) when -Y- is -O- then p cannot be 0; and (e) the compound 3-[(phenylmethyl)-(3S)-3-pyrrolidinylamino]-propanenitrile is excluded;

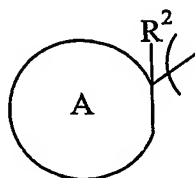
20 a compound of formula (IF)



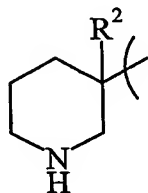
(IF)

wherein

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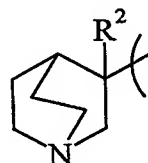


is a group of formula (a) or (b)



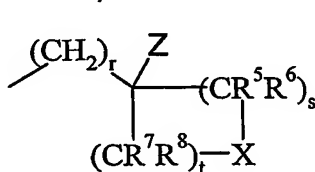
(a)

or

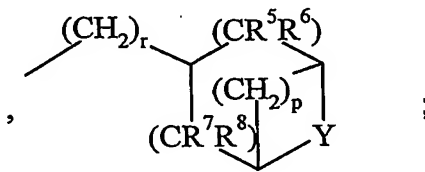


(b)

$R^1$  is  $C_1$ - $C_6$  alkyl (optionally substituted with 1, 2 or 3 halo substituents and/or with 1 substituent selected from -S-( $C_1$ - $C_3$  alkyl), -O-( $C_1$ - $C_3$  alkyl) (optionally substituted with 1, 2 or 3 F atoms), -O-( $C_3$ - $C_6$  cycloalkyl), -SO<sub>2</sub>-( $C_1$ - $C_3$  alkyl), -CN, -COO-( $C_1$ - $C_2$  alkyl) and -OH);  $C_2$ - $C_6$  alkenyl; -(CH<sub>2</sub>)<sub>q</sub>-Ar<sub>2</sub>; or a group of formula (i) or (ii)



(i)



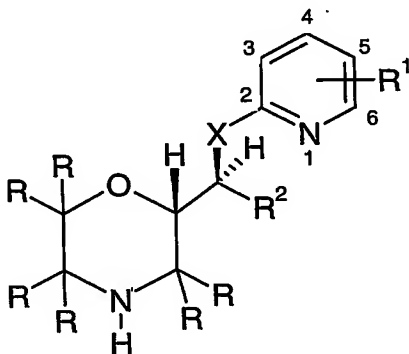
(ii)

$R^2$ ,  $R^3$  and  $R^4$  are each independently selected from hydrogen or  $C_1$ - $C_2$  alkyl;  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  are at each occurrence independently selected from hydrogen or  $C_1$ - $C_2$  alkyl; -X- is a bond, -CH<sub>2</sub>-, -CH=CH-, -O-, -S-, or -SO<sub>2</sub>-; -Y- is a bond, -CH<sub>2</sub>- or -O-; -Z is hydrogen, -OH or -O-( $C_1$ - $C_3$  alkyl); p is 0, 1 or 2; q is 0, 1 or 2; r is 0 or 1; s is 0, 1, 2 or 3; t is 0, 1, 2 or 3; Ar<sub>1</sub> is phenyl, pyridyl, thiazolyl, benzothiophenyl or naphthyl; wherein said phenyl, pyridyl or thiazolyl group may be substituted with 1, 2 or 3 substituents each independently selected from halo, cyano,  $C_1$ - $C_4$  alkyl (optionally substituted with 1, 2 or 3 F atoms), -O-( $C_1$ - $C_4$  alkyl) (optionally substituted with 1, 2 or 3 F atoms) and -S-( $C_1$ - $C_4$  alkyl) (optionally substituted with 1, 2 or 3 F atoms) and/or with 1 substituent selected from pyridyl, pyrazole, phenyl (optionally substituted with 1, 2 or 3 halo substituents), benzyl and phenoxy (optionally substituted with 1, 2 or 3 halo substituents); and wherein said benzothiophenyl or naphthyl group may be optionally substituted with 1, 2 or 3

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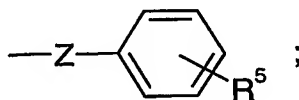
substituents each independently selected from halo, cyano, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms), -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms), and -S-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); Ar<sub>2</sub> is naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl, wherein said naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl may be substituted with 1, 2 or 3 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms) and -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); or a pharmaceutically acceptable salt thereof; provided that (a) the cyclic portion of the group of formula (i) must contain at least three carbon atoms and not more than seven ring atoms; (b) when -X- is -CH=CH-, then the cyclic portion of the group of formula (i) must contain at least five carbon atoms; and (c) when -Z is -OH or -O-(C<sub>1</sub>-C<sub>3</sub> alkyl), then -X- is -CH<sub>2</sub>-; and (d) when -Y- is -O- then p cannot be 0; and

a compound of formula (IG)



(IG)

wherein -X- is -S- or -O-; each R is independently selected from H or C<sub>1</sub>-C<sub>4</sub> alkyl; R<sup>1</sup> is H, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, trifluoromethyl, trifluoromethoxy, -NR<sup>3</sup>R<sup>4</sup>, -CONR<sup>3</sup>R<sup>4</sup>, -COOR<sup>3</sup> or a group of the formula (i)



(i)

R<sup>2</sup> is C<sub>1</sub>-C<sub>4</sub> alkyl, phenyl or phenyl substituted with 1, 2 or 3 substituents each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, nitro, hydroxy, cyano, halo, trifluoromethyl, trifluoromethoxy, benzyl, benzyloxy, -NR<sup>6</sup>R<sup>7</sup>, -CONR<sup>6</sup>R<sup>7</sup>, COOR<sup>6</sup>, -



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$\text{SO}_2\text{NR}^6\text{R}^7$  and  $-\text{SO}_2\text{R}^6$ ;  $\text{R}^5$  is selected from  $\text{C}_1$ - $\text{C}_4$  alkyl,  $\text{C}_1$ - $\text{C}_4$  alkoxy, carboxy, nitro, hydroxy, cyano, halo, trifluoromethyl, trifluoromethoxy, benzyl, benzyloxy,  $-\text{NR}^8\text{R}^9$ ,  $-\text{CONR}^8\text{R}^9$ ,  $-\text{SO}_2\text{NR}^8\text{R}^9$  and  $-\text{SO}_2\text{R}^8$ ;  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^6$ ,  $\text{R}^7$ ,  $\text{R}^8$  and  $\text{R}^9$  are each independently selected from H or  $\text{C}_1$ - $\text{C}_4$  alkyl; and  $-\text{Z}-$  is a bond,  $-\text{CH}_2-$ , or  $-\text{O}-$ ;

5 or a pharmaceutically acceptable salt thereof.

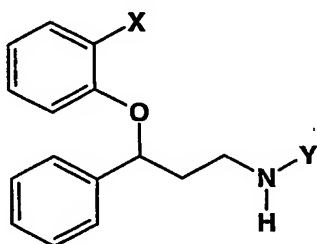
2. Use of a norepinephrine reuptake inhibitor selected from the group consisting of:

atomoxetine or a pharmaceutically acceptable salt thereof;

10 racemic reboxetine or a pharmaceutically acceptable salt thereof;

(S,S) reboxetine or a pharmaceutically acceptable salt thereof;

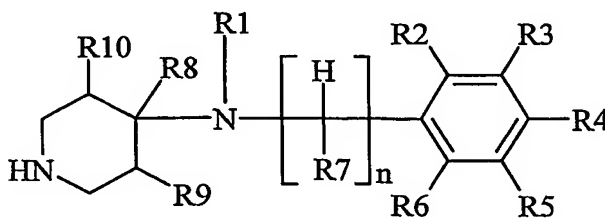
a compound of formula (I):



(I)

15 wherein X is  $\text{C}_1$ - $\text{C}_4$  alkylthio, and Y is  $\text{C}_1$ - $\text{C}_2$  alkyl, or a pharmaceutically acceptable salt thereof;

a compound of formula (IA):



(IA)

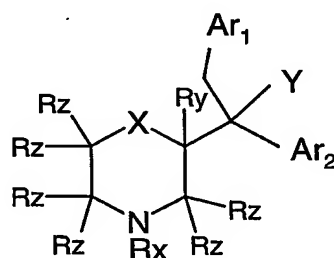
20 wherein n is 1, 2 or 3;  $\text{R}^1$  is  $\text{C}_2$ - $\text{C}_{10}$ alkyl,  $\text{C}_2$ - $\text{C}_{10}$ alkenyl,  $\text{C}_3$ - $\text{C}_8$ cycloalkyl or  $\text{C}_4$ - $\text{C}_{10}$ cycloalkylalkyl, wherein one C-C bond within any cycloalkyl moiety is optionally

substituted by an O-C or C=C bond and wherein each group is optionally substituted with from 1 to 7 halogen substituents and/or with from 1 to 3 substituents each independently selected from hydroxy, cyano, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy; R<sub>2</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkyl-S(O)<sub>x</sub>- wherein x is 0, 1 or 2 (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms), cyano, halogen, phenyl (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy), phenoxy (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy) or -CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub>alkyl), or together with R<sub>3</sub> forms a further benzene ring (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy); R<sub>3</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkyl-S(O)<sub>x</sub>- wherein x is 0, 1 or 2 (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms), cyano, halogen, phenyl (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy), phenoxy (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy) or -CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub>alkyl), or together with R<sub>2</sub> or R<sub>4</sub> forms a further benzene ring (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy); R<sub>4</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkyl-S(O)<sub>x</sub>- wherein x is 0, 1 or 2 (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms), cyano, halogen, phenyl (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy), phenoxy (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy) or -CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub>alkyl), or together with R<sub>3</sub> forms a further benzene ring (optionally substituted with from 1 to 3 substituents each independently selected from halogen, C<sub>1</sub>-

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C<sub>4</sub>alkyl and C<sub>1</sub>-C<sub>4</sub>alkoxy); R<sub>5</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms) or halogen; R<sub>6</sub> is H, C<sub>1</sub>-C<sub>4</sub>alkyl (optionally substituted with from 1 to 7 halogen atoms), C<sub>1</sub>-C<sub>4</sub>alkoxy (optionally substituted with from 1 to 7 halogen atoms) or halogen; R<sub>7</sub> is H or C<sub>1</sub>-C<sub>4</sub>alkyl; R<sub>8</sub> is H or C<sub>1</sub>-C<sub>4</sub>alkyl; R<sub>9</sub> is H, halogen, hydroxy, cyano, C<sub>1</sub>-C<sub>4</sub>alkyl or C<sub>1</sub>-C<sub>4</sub>alkoxy; and R<sub>10</sub> is H, halogen, hydroxy, cyano, C<sub>1</sub>-C<sub>4</sub>alkyl or C<sub>1</sub>-C<sub>4</sub>alkoxy; or a pharmaceutically acceptable salt thereof, with the proviso that the compound N-ethyl-N-benzyl-4-piperidinamine is excluded;

a compound of formula (IB):

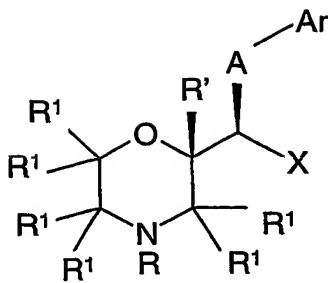


(IB)

wherein R<sub>x</sub> is H; R<sub>y</sub> is H or C<sub>1</sub>-C<sub>4</sub> alkyl; each R<sub>z</sub> is independently H or C<sub>1</sub>-C<sub>4</sub> alkyl; X represents O; Y represents OH or OR; R is C<sub>1</sub>-C<sub>4</sub> alkyl; Ar<sub>1</sub> is a phenyl ring or a 5- or 6-membered heteroaryl ring each of which may be substituted with 1, 2, 3, 4 or 5 substituents (depending upon the number of available substitution positions) each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl), S(C<sub>1</sub>-C<sub>4</sub> alkyl), halo, hydroxy, pyridyl, thiophenyl and phenyl optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, or O(C<sub>1</sub>-C<sub>4</sub> alkyl); and Ar<sub>2</sub> is a phenyl ring or a 5- or 6-membered heteroaryl ring each of which may be substituted with 1, 2, 3, 4 or 5 substituents (depending upon the number of available substitution positions) each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl) and halo; wherein each above-mentioned C<sub>1</sub>-C<sub>4</sub> alkyl group is optionally substituted with one or more halo atoms; or a pharmaceutically acceptable salt thereof;

a compound of formula (IC)

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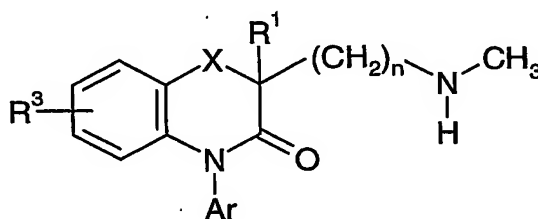


(IC)

wherein: A is S or O; R is H; Ar is a phenyl group optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl),

- 5 S(C<sub>1</sub>-C<sub>4</sub> alkyl), halo, hydroxy, CO<sub>2</sub>(C<sub>1</sub>-C<sub>4</sub> alkyl), pyridyl, thiophenyl and phenyl optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, or O(C<sub>1</sub>-C<sub>4</sub> alkyl); X is a phenyl group optionally substituted with 1, 2, 3, 4 or 5 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, or O(C<sub>1</sub>-C<sub>4</sub> alkyl); a C<sub>1</sub>-C<sub>4</sub> alkyl group; a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group or a CH<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub> cycloalkyl)
- 10 group; R' is H or C<sub>1</sub>-C<sub>4</sub> alkyl; each R<sup>1</sup> is independently H or C<sub>1</sub>-C<sub>4</sub> alkyl; wherein each above-mentioned C<sub>1</sub>-C<sub>4</sub> alkyl group is optionally substituted with one or more halo atoms; or a pharmaceutically acceptable salt thereof; with the proviso that, when A is O, X is a C<sub>1</sub>-C<sub>4</sub> alkyl group, a C<sub>3</sub>-C<sub>6</sub> cycloalkyl group or a CH<sub>2</sub>(C<sub>3</sub>-C<sub>6</sub> cycloalkyl) group;

a compound of formula (ID)

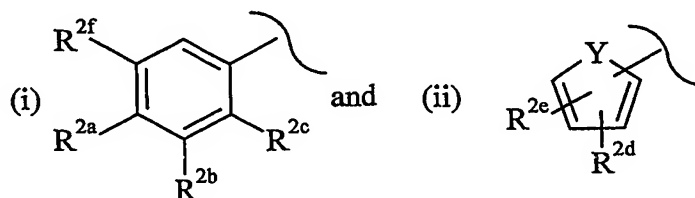


(ID)

wherein -X- is -C(R<sup>4</sup>R<sup>5</sup>)-, -O- or -S-; n is 2 or 3; R<sup>1</sup> is H or C<sub>1</sub>-C<sub>4</sub> alkyl; R<sup>3</sup> is H, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, O(C<sub>1</sub>-C<sub>4</sub> alkyl), nitrile, phenyl or substituted phenyl; R<sup>4</sup> and R<sup>5</sup> are each independently selected from H or C<sub>1</sub>-C<sub>4</sub> alkyl; Ar- is selected from the group consisting

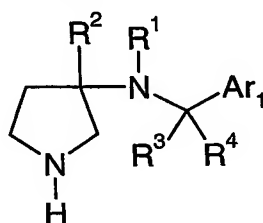
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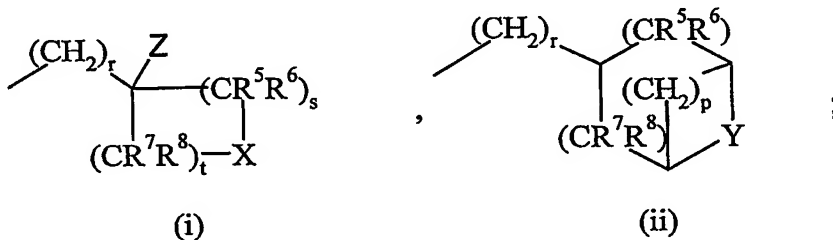
- in which R<sup>2a</sup> is H, halo, methyl or ethyl; R<sup>2b</sup> is H, halo or methyl; R<sup>2c</sup> is H, halo, methyl, trifluoromethyl, nitrile, or methoxy; R<sup>2d</sup> is H, halo, methyl or ethyl; R<sup>2e</sup> is H, halo, methyl, trifluoromethyl, nitrile, or methoxy; R<sup>2f</sup> is H, or fluoro; -Y- is -O-, -S- or -N(R<sup>6</sup>)-; and R<sup>6</sup> is H or methyl or a pharmaceutically acceptable salt thereof;

a compound of formula (IE)



(IE)

- wherein R<sup>1</sup> is C<sub>1</sub>-C<sub>6</sub> alkyl (optionally substituted with 1, 2 or 3 halo substituents and/or with 1 substituent selected from -S-(C<sub>1</sub>-C<sub>3</sub> alkyl), -O-(C<sub>1</sub>-C<sub>3</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms), -O-(C<sub>3</sub>-C<sub>6</sub> cycloalkyl), -SO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub> alkyl), -CN, -COO-(C<sub>1</sub>-C<sub>2</sub> alkyl) and -OH); C<sub>2</sub>-C<sub>6</sub> alkenyl; -(CH<sub>2</sub>)<sub>q</sub>-Ar<sub>2</sub>; or a group of formula (i) or (ii)



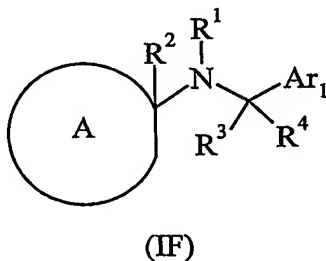
- R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are each independently selected from hydrogen or C<sub>1</sub>-C<sub>2</sub> alkyl; R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>8</sup> are at each occurrence independently selected from hydrogen or C<sub>1</sub>-C<sub>2</sub> alkyl; -X- is a bond, -CH<sub>2</sub>-, -CH=CH-, -O-, -S-, or -SO<sub>2</sub>-; -Y- is a bond, -CH<sub>2</sub>- or -O-; -Z is hydrogen, -OH or -O-(C<sub>1</sub>-C<sub>3</sub> alkyl); p is 0, 1 or 2; q is 0, 1 or 2; r is 0 or 1; s is 0, 1, 2 or 3; t is 0, 1, 2 or 3; Ar<sub>1</sub> is phenyl, pyridyl, thiazolyl, benzothiophenyl or naphthyl; wherein said phenyl, pyridyl or thiazolyl group may be substituted with 1, 2 or 3 substituents each independently selected from halo, cyano, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally

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substituted with 1, 2 or 3 F atoms), -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms) and -S-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms) and/or with 1 substituent selected from pyridyl, pyrazole, phenyl (optionally substituted with 1, 2 or 3 halo substituents) and phenoxy (optionally substituted with 1, 2 or 3 halo substituents);

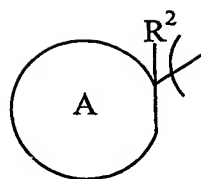
- 5 and wherein said benzothiophenyl or naphthyl group may be optionally substituted with 1, 2 or 3 substituents each independently selected from halo, cyano, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms), -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms), and -S-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); Ar<sub>2</sub> is naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl, wherein said naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl  
10 may be substituted with 1, 2 or 3 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms) and -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); or a pharmaceutically acceptable salt thereof; provided that (a) the cyclic portion of the group of formula (i) must contain at least three  
15 carbon atoms and not more than seven ring atoms; (b) when -X- is -CH=CH-, then the cyclic portion of the group of formula (i) must contain at least five carbon atoms; and (c) when -Z is -OH or -O-(C<sub>1</sub>-C<sub>3</sub> alkyl), then -X- is -CH<sub>2</sub>-; (d) when -Y- is -O- then p cannot be 0; and (e) the compound 3-[(phenylmethyl)-(3S)-3-pyrrolidinylamino]-propanenitrile is excluded;

- 20 a compound of formula (IF)

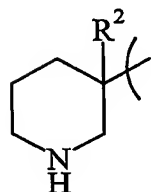


wherein

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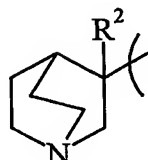


is a group of formula (a) or (b)



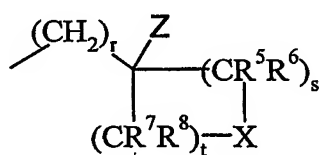
(a)

or

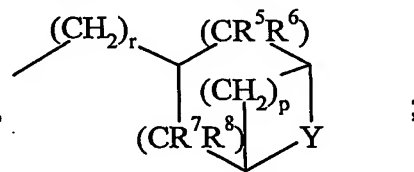


(b)

$R^1$  is  $C_1$ - $C_6$  alkyl (optionally substituted with 1, 2 or 3 halo substituents and/or with 1 substituent selected from -S-( $C_1$ - $C_3$  alkyl), -O-( $C_1$ - $C_3$  alkyl) (optionally substituted with 1, 2 or 3 F atoms), -O-( $C_3$ - $C_6$  cycloalkyl), -SO<sub>2</sub>-( $C_1$ - $C_3$  alkyl), -CN, -COO-( $C_1$ - $C_2$  alkyl) and -OH);  $C_2$ - $C_6$  alkenyl; -(CH<sub>2</sub>)<sub>q</sub>-Ar<sub>2</sub>; or a group of formula (i) or (ii)



(i)



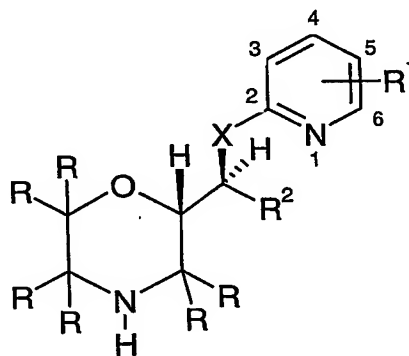
(ii)

$R^2$ ,  $R^3$  and  $R^4$  are each independently selected from hydrogen or  $C_1$ - $C_2$  alkyl;  $R^5$ ,  $R^6$ ,  $R^7$  and  $R^8$  are at each occurrence independently selected from hydrogen or  $C_1$ - $C_2$  alkyl; -X- is a bond, -CH<sub>2</sub>-, -CH=CH-, -O-, -S-, or -SO<sub>2</sub>-; -Y- is a bond, -CH<sub>2</sub>- or -O-; -Z is hydrogen, -OH or -O-( $C_1$ - $C_3$  alkyl); p is 0, 1 or 2; q is 0, 1 or 2; r is 0 or 1; s is 0, 1, 2 or 3; t is 0, 1, 2 or 3; Ar<sub>1</sub> is phenyl, pyridyl, thiazolyl, benzothiophenyl or naphthyl; wherein said phenyl, pyridyl or thiazolyl group may be substituted with 1, 2 or 3 substituents each independently selected from halo, cyano,  $C_1$ - $C_4$  alkyl (optionally substituted with 1, 2 or 3 F atoms), -O-( $C_1$ - $C_4$  alkyl) (optionally substituted with 1, 2 or 3 F atoms) and -S-( $C_1$ - $C_4$  alkyl) (optionally substituted with 1, 2 or 3 F atoms) and/or with 1 substituent selected from pyridyl, pyrazole, phenyl (optionally substituted with 1, 2 or 3 halo substituents), benzyl and phenoxy (optionally substituted with 1, 2 or 3 halo substituents); and wherein said benzothiophenyl or naphthyl group may be optionally substituted with 1, 2 or 3

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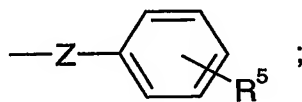
substituents each independently selected from halo, cyano, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms), -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms), and -S-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); Ar<sub>2</sub> is naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl, wherein said naphthyl, pyridyl, thiazolyl, furyl, thiophenyl, benzothiophenyl, or phenyl may be substituted with 1, 2 or 3 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl (optionally substituted with 1, 2 or 3 F atoms) and -O-(C<sub>1</sub>-C<sub>4</sub> alkyl) (optionally substituted with 1, 2 or 3 F atoms); or a pharmaceutically acceptable salt thereof; provided that (a) the cyclic portion of the group of formula (i) must contain at least three carbon atoms and not more than seven ring atoms; (b) when -X- is -CH=CH-, then the cyclic portion of the group of formula (i) must contain at least five carbon atoms; and (c) when -Z is -OH or -O-(C<sub>1</sub>-C<sub>3</sub> alkyl), then -X- is -CH<sub>2</sub>-; and (d) when -Y- is -O- then p cannot be 0; and

a compound of formula (IG)



(IG)

wherein -X- is -S- or -O-; each R is independently selected from H or C<sub>1</sub>-C<sub>4</sub> alkyl; R<sup>1</sup> is H, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, trifluoromethyl, trifluoromethoxy, -NR<sup>3</sup>R<sup>4</sup>, -CONR<sup>3</sup>R<sup>4</sup>, -COOR<sup>3</sup> or a group of the formula (i)



(i)

R<sup>2</sup> is C<sub>1</sub>-C<sub>4</sub> alkyl, phenyl or phenyl substituted with 1, 2 or 3 substituents each independently selected from C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, nitro, hydroxy, cyano, halo, trifluoromethyl, trifluoromethoxy, benzyl, benzyloxy, -NR<sup>6</sup>R<sup>7</sup>, -CONR<sup>6</sup>R<sup>7</sup>, COOR<sup>6</sup>, -



$\text{SO}_2\text{NR}^6\text{R}^7$  and  $-\text{SO}_2\text{R}^6$ ;  $\text{R}^5$  is selected from  $\text{C}_1$ - $\text{C}_4$  alkyl,  $\text{C}_1$ - $\text{C}_4$  alkoxy, carboxy, nitro, hydroxy, cyano, halo, trifluoromethyl, trifluoromethoxy, benzyl, benzyloxy,  $-\text{NR}^8\text{R}^9$ ,  $-\text{CONR}^8\text{R}^9$ ,  $-\text{SO}_2\text{NR}^8\text{R}^9$  and  $-\text{SO}_2\text{R}^8$ ;  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^6$ ,  $\text{R}^7$ ,  $\text{R}^8$  and  $\text{R}^9$  are each independently selected from H or  $\text{C}_1$ - $\text{C}_4$  alkyl; and -Z- is a bond,  $-\text{CH}_2-$ , or  $-\text{O}-$ ;

5           or a pharmaceutically acceptable salt thereof,  
for the manufacture of a medicament for the treatment of a learning disability or a Motor Skills Disorder.

3. The method of claim 1 or the use of claim 2, wherein said learning disability  
10 is selected from the group consisting of a developmental speech and language disorder and a learning disorder.

4. The method or use of claim 3, wherein said developmental speech and language disorder is selected from the group consisting of developmental articulation  
15 disorder, developmental expressive language disorder, and developmental receptive language disorder.

5. The method or use of claim 3, wherein said learning disorder is selected from the group consisting of reading disorder, mathematics disorder, disorder of written  
20 expression, and learning disorder not otherwise specified.

6. The method of any one of claims 1, 3, 4, or 5, or the use of any one of claims 2, 3, 4, or 5, wherein said norepinephrine reuptake inhibitor is atomoxetine hydrochloride.